



RECEIVED
CENTRAL FAX CENTER

SEP 30 2005

**North America
Intellectual Property Corporation**

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

FAX: 806-498-6673

e-mail: winstonhsu@naipo.com

Customer No.: 27765

Fax To: KIM, ROBERT H

Tel.: (571) 272-2293

Art Unit: 2871

Fax: (571) 273-8300

From : Winston Hsu, Registration No. 41,526

Serial No.: 10/710,887

Attorney Docket No.: CPTP0002USA

Subject: Information Disclosure Statement (IDS)

Total Pages: 301 pages (including cover page)

Winston Hsu 2005/09/30

CPTP0001USA0_D1_1

RECEIVED
CENTRAL FAX CENTER

SEP 30 2005

PTO/SB/Z1 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/710,887	
	Filing Date	08/10/2004	
	First Named Inventor	Meng-Chi Liu	
	Art Unit	2871	
	Examiner Name	KIM, ROBERT H	
Total Number of Pages in This Submission	300	Attorney Docket Number	CPTP0002USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	North America Intellectual Property Corporation		
Signature	<i>Winston Hsu</i>		
Printed name	Winston Hsu		
Date	09/30/2005	Reg. No.	41,526

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature	<i>Cindy Lin</i>		
Typed or printed name	Cindy Lin	Date	09/30/2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (12-04)


Approved for use through 07/31/2006. OMB 0661-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).		Complete If Known	
FEE TRANSMITTAL For FY 2005		Application Number	10/710,887
		Filing Date	08/10/2004
		First Named Inventor	Meng-Chi Liu
		Examiner Name	KIM, ROBERT H
		Art Unit	2871
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Attorney Docket No.	CPTP0002USA
TOTAL AMOUNT OF PAYMENT		(\$) 0.00	

METHOD OF PAYMENT (check all that apply)

			
--	--	--	--

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fees Paid (\$)
_____	_____	_____	_____	_____

_____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

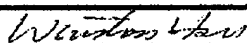
4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: submission of Information Disclosure Statement

Fees Paid (\$)

0.00

SUBMITTED BY			
Signature		Registration No. 41,526 (Attorney/Agent)	Telephone 302-729-1562
Name (Print/Type)	Winston Hsu	Date 09/30/2005	

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/08A (08-03)

Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/710,887
Filing Date	08/10/2004
First Named Inventor	Meng-Chi Liu
Art Unit	2871
Examiner Name	KIM, ROBERT H
Attorney Docket Number	CPTP0002USA

Sheet 1 of 2

U. S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1	US- 5,648,796	07-15-1997	Boursier, et al.	all
	2	US- 6,281,958 B1	08-28-2001	Nakajima	all
	3	US- 6,341,003 B1	01-22-2002	Ashizawa, et al.	all
	4	US- 6,417,900 B1	07-09-2002	Shin, et al.	all
	5	US- 5,990,924	11-23-1999	Kido, et al.	all
	6	US- 6,266,118 B1	07-24-2001	Lee, et al.	all
	7	US- 2002/0024618 A1	02-20-2002	Imai, Masao	all
	8	US- 6,449,025 B2	09-10-2002	Lee	all
	9	US- 6,525,794 B1	02-25-2003	Kim, et al.	all
	10	US- 2002/0024618 A1	02-28-2002	Imai, Masao	all
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	† ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	11	JP 9-230310	09-05-1997			+
	12	JP 7-181451	07-21-1995			+
	13	JP 11-234539	08-27-1999			+
	14	JP P2001-296523A	10-26-2001			+
	15	JP 10-119343	05-12-1998			+
	16	JP P2000-131717A	05-12-2000			+

Examiner Signature	Date Considered
-----------------------	--------------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ²Applicant's unique citation designation number (optional). ³See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁷Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (08-03)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/710,887
Filing Date	08/10/2004
First Named Inventor	Meng-Chi Liu
Art Unit	2871
Examiner Name	KIM, ROBERT H
Attorney Docket Number	CPT0002USA

Sheet 2 of 2

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	†
		Country Code ² *Number ³ *Kind Code ⁶ (if known)	MM-DD-YYYY			
	17	JP P2002-72980A	03-12-2002			+
	18	JP P2002-526816A	08-20-2002			+
	19	WO 00/21037	04-13-2000	MICROSOFT CORPORATION		+

Examiner Signature	Date Considered
-----------------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1460. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1460.

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

RECEIVED
CENTRAL FAX CENTER

SEP 30 2005

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Liu Meng-chi

5

Lin Chung-ge

Lin Kuang-shyang

Shiau Fu-yuan

Appl. No.: 10/710,887

Filing Date: 08/10/2004

Examiner: KIM, ROBERT H

Art Unit: 2871

10 Docket No.: CPTP0002USA

Confirmation No.: 4886

Title: MULTI-DOMAIN VERTICAL ALIGNMENT LIQUID
CRYSTAL DISPLAY PANEL

15 To: Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

Subject: Information disclosure statement under 37 CFR §1.56
20

Dear Sir,

This is an Information Disclosure Statement in accordance with the
25 duty to disclose information material to patentability under 37 CFR
§1.56. The applicant wishes to make of record the document(s) listed on
the accompanying form PTO/SB/08.

All items of information contained in this IDS were disclosed by the
30 inventors. Since this IDS is filed before the mailing date of the first
Office action, consideration of the information disclosure statement is
hereby requested according to 37 CFR §1.97(b).

According to the requirement set forth in 37 C.F.R. §1.98 and M.P.E.P. 609, the applicants are submitting a copy of the cited reference (Japan Patent JP9-230310) and an English language abstract of the cited
5 Japan patent. The English language title and abstract of JP9-230310 are listed as follows:

Title:

**DISPLAY DEVICE, ACTIVE MATRIX LIQUID CRYSTAL DISPLAY
10 DEVICE AND DISPLAY METHOD**

Abstract

Problem to be solved:

To provide a display device, etc., capable of displaying three colors
15 or above by one dot

Solution:

First, second applied voltages obtained based on an applied voltage
VA supplied to the dot are applied to first, second display elements
20 (liquid crystal elements) 10, 12 provided on first, second dot areas in the dot. Or, an applied voltage-transmissivity characteristic is made be different between the first, second display elements 10, 12. Then, a first color conversion means (color filter) 20 performing color conversion of cyan and a second color conversion means 22
25 performing the color conversion of red in a complementary color relation with the cyan are provided answering to respective first, second display elements 10, 12. Thus, the color displays of white, red and black are made possible. Three or above of color conversion means may be provided in one dot. The matter that a display panel is
30 divided, and the arrangement constitution of the color conversion means are made different in respective panel areas is preferable. The matter that a pixel electrode is divided to sub-pixel electrodes, and

color filters are provided on respective electrodes is preferable.

According to the requirement set forth in 37 C.F.R. §1.98 and M.P.E.P. 609, the applicants are submitting a copy of the cited reference
5 (Japan Patent JP7-181451) and an English language abstract of the cited Japan patent. The English language title and abstract of JP07-181451 are listed as follows:

Title:

10 **DISPLAY DEVICE**

Abstract

Purpose:

To suppress the generation of the linear defects occurring in the
15 shapes of dividing pixels for the purpose of multigradation display with simple constitution.

Constitution:

This display device has the plural pixels divided to ≥ 3 sub-pixels
20 of areas varying from each other in order for the respective unit pixel to express a halftone. the area of the sub-pixels having the largest area is below the total sum of the areas of the sub-pixels exclusive of these sub-pixels. The display device has an image processing circuit for expressing the gradation levels more than the number of the gradation
25 levels expressed by one unit pixel by using the plural unit pixels.

According to the requirement set forth in 37 C.F.R. §1.98 and M.P.E.P. 609, the applicants are submitting a copy of the cited reference (Japan
Patent JP11-234539) and an English language abstract of the cited Japan
30 patent. The English language title and abstract of JP11-234539 are listed as follows:

Title:

LIQUID CRYSTAL PROJECTION DEVICE

Abstract

5 **Problem to be solved:**

To provide a gamma correction device for the liquid crystal projection device that applies optimum gamma correction to a video signal independently of changes in the surrounding illuminance.

10 **Solution:**

The gamma correction device 2 of the liquid crystal projection device 1 measures the illuminance on a projected face measured by an illuminance sensor 21, obtains a dynamic range of the device 1 specified by a white level and a black level through real emission
15 based on the measurement result and applies gamma correction in the range. A display device drive circuit 3 receiving the video signal after the gamma correction drives a liquid crystal light bulb 4, which provides an image corresponding to the video signal. Even when the illuminance in an operating environment is subject to change, the
20 gamma correction is applied to the video signal so as to obtain a proper linearity characteristics without whity black pixels and deformed black pixels and then the video signal is reproduced with high reproducibility and fidelity.

25 According to the requirement set forth in 37 C.F.R. §1.98 and M.P.E.P. 609, the applicants are submitting a copy of the cited reference (Japan Patent JP P2001-296523A) and an English language abstract of the cited Japan patent. The English language title and abstract of JP2001-296523 are listed as follows:

30

Title:

REFLECTION TYPE LIQUID CRYSTAL DISPLAY

Abstract**Problem to be solved:**

To improve both of the brightness and color reproducibility in a
5 reflection type liquid crystal display.

Solution:

Pixels of four colors of red R, green G, blue B and white W are
formed as the pixels of the reflection type liquid crystal display.

10

According to the requirement set forth in 37 CFR §1.98(a)(2), the applicants are
submitting a copy of the cited Japan patent JP 10-119343 (published May 12, 1998),
JP P2000-131717A (published May 12, 2000), JP P2002-72980A (published March 12,
2002) and JP P2002-526816A (published August 20, 2002). In accordance with MPEP
15 609 III A(3), an English-language equivalent application may be submitted to fulfill
the requirement for a concise explanation of relevance. Accordingly, the
English-language equivalent US patent 5,990,924 of the Japan patent JP 10-119343,
the English-language equivalent US patent 6,266,118 B1 of the Japan patent JP
P2000-131717A, the English-language equivalent US patent 2002/0024618 A1 of the
20 Japan patent P2002-72980A, and the English-language equivalent international
patent publication WO 00/21037 of the Japan patent JP P2002-526816A are hereby
presented to fulfill the 37 CFR §1.98(a)(3) requirement.

It is respectfully requested that the examiner can consider the
25 document(s) listed on the accompanying form PTO/SB/08 and that it be
made of record in the application. The applicants sincerely hope that
the examiner initials the cited reference(s) on the form and that a copy
of the initialed form be sent to the applicants with the next
communication from the examiner.

30

Respectfully submitted,

Winston Hsu

Date: September 30, 2005

Winston Hsu, Patent Agent No. 41,526

5 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 10 Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.